

**Compliance statement****I. Programmable three axis automated actuation system**

Sl. no.	Description	Party 's remarks
1.	Design by party (for details refer section 1.3.1 of annexure-I)	
2.	Detailed engineering by party (for details refer section 1.3.2 of annexure-I)	
3.	Design review by IPRC (for details refer section 1.3.3 of annexure-I)	
4.	Fabrication drawings by party (for details refer section 1.3.4 of annexure-I)	
5.	Supply of Fore end & aft end support unit (for details refer section 1.3.2 & 1.3.5 of annexure-I)	
6.	Supply of 3 axis actuation system (for details refer section 1.3.2 & 1.3.5 of annexure-I) a) 360 deg. clockwise and anticlockwise rotation along longitudinal X-axis b) 180 deg. forward & reverse swing along lateral Y- axis c) 90 deg. horizontal to vertical & vice versa tilting along Z-axis d) Speed of rotation : 2 to 20 rpm.(Variable) e) Swing speed : 5 to 20 Sec. per cycle (Variable) f) Tilt speed : 5 to 20 Sec. per cycle (Variable)	
7.	Supply of control unit (for details refer section 1.3.2 & 1.3.5 of annexure-I) a) Control units (PLC) shall be provided for simultaneous motions (X, Y & Z) and individual motions (X / Y / Z) with Group II A protection. b) Remote Control with Group II A protection. (for details refer section 1.3.2 & 1.3.5 of annexure-I)	
8.	Load testing : a) The Automated rotating system has to be load tested for specimen weight of 500 kg for dynamic loading condition at party's site. b) During pre-delivery inspection (PDI) the entire functioning of the equipment has to be demonstrated to IPRC representative. PDI shall also include the testing the functioning of the system with load. Details of load shall be referred in section 1.3.2 & 1.3.6 of annexure-I	
9.	Installation and commissioning at IPRC (for details refer section 1.3.7 of annexure-I)	

## II) IPA servicing system

Sl. no.	Description	Party's remarks
1.	Conceptual drawing (for details refer section 2.2.1 of annexure-I)	
2.	Detailed engineering (for details refer section 2.2.2 of annexure-I)	
3.	<p>Requirements (for details refer section 2.2.2 of annexure-I)</p> <p>Servicing pump</p> <ul style="list-style-type: none"> <li>➤ Type : Mono-Block centrifugal magnetic coupled chemical pump with motor mechanically coupled sealless pump.</li> <li>➤ Material of construction : PP</li> <li>➤ Capacity : 15 m<sup>3</sup>/hr.</li> <li>➤ Head : 23 m</li> <li>➤ Liquid temperature : up to 100 degree centigrade</li> <li>➤ Liquid specific gravity : up to 1.8</li> <li>➤ System pressure : up to 3 bar at 20 degree centigrade</li> <li>➤ End connection : BSP threaded</li> <li>➤ Fluid : Iso Propyl Alcohol</li> </ul> <p>Electrical : Motor suitable for operation in flammable area confirming to IS 2148 Gr. IIA.</p> <ul style="list-style-type: none"> <li>➤ Phase : 3</li> <li>➤ Voltage : 440 V, 50 Hz</li> <li>➤ Power : 3.7 kW</li> <li>➤ Speed : 2900 rpm</li> <li>➤ Motor &amp; electrical Fittings: Flame proof as per IS 2148 Gr. IIA</li> <li>➤ Temperature class : T4 &amp; IP 65</li> </ul>	
4.	Filters (for details refer section 2.2.2 of annexure-I)	
5.	Manual ball Valves (for details refer section 2.2.2 of annexure-I)	
6.	Tubings(for details refer section 2.2.2 of annexure-I)	
7.	Flexible hoses(for details refer section 2.2.2 of annexure-I)	
8.	QC/DC (for details refer section 2.2.2 of annexure-I)	
9.	Storage tank (for details refer section 2.2.2 of annexure-I)	
10.	Adaptors(for details refer section 2.2.2 of annexure-I)	
11.	Inspection (for details refer section 2.2.3 of annexure-I)	
12.	<p>Testing (for details refer section 2.2.4 of annexure-I)</p> <ul style="list-style-type: none"> <li>• Individual fluid circuit to be tested hydraulically to a pressure of 15 bar.</li> <li>• Leak test to be conducted for SS tank.</li> </ul>	
13.	Installation and commissioning at IPRC (for details refer section (for details refer section 2.2.5 of annexure-I)	